

University of Porto
Faculty of Psychology and Education Sciences

**IS EMOTION SUPPRESSION ADAPTIVE? LINKING PARENTAL WORK-
RELATED EMOTIONAL EXHAUSTION TO EMOTION REGULATION IN
CHILDREN**

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October 2017

Dissertation presented for the Integrated Master's in Psychology,
Faculty of Psychology and Education Sciences of the University of
Porto, orientated by Professor *Paula Mena Matos*, PhD (FPCEUP)

A presente dissertação de mestrado decorreu no âmbito do Projeto (RE)CONCILIAR: Impacto da Conciliação Trabalho-Família na Parentalidade e no Desenvolvimento das Crianças, financiado pela Fundação para a Ciência e a Tecnologia (PTDC/MHCCED/5218/2012).

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*Vejo em ti repetida,
A anos de distância,
A minha própria vida,
A minha própria infância.*

*É tal a semelhança,
É tal a identidade,
Que é só em ti, criança,
Que entendo a eternidade.*

*Todo o meu ser se exala,
Se reproduz no teu:
É minha a tua fala,
Quem vive em ti, sou eu.*

[...]

(Alberto d'Oliveira, “À minha filha”, in “*Lar*”)

**Aos meus pais,
por me fazerem existir, por me ajudarem
a crescer, por me permitirem ser.**

Acknowledgments

To Professor Paula Mena Matos, for the unwavering patience and availability. Thank you for the challenge, for the guidance, and above all for introducing me to an exhilarating new world.

To Professor Marisa Matias, for making herself availability and always smiling through every statistical ‘hiccup’.

To all parents and teachers who agreed to participate in this study. I hope the findings presented here may somehow serve them in the demanding and amazing task that is child rearing.

To my incredible friends and ‘soul mates’. To Liliana, for stressing out with me and always making me feel less alone. To Helena, for every late-night coffee shop debate. To Ana Rita, for being my dissertation partner. To Ana Maria, Jéssica and Sofia G., for never keeping their distance, no matter how afar they are. To Sofia B., for being the other half of our ‘pair’.

To my grandparents, Almerinda, Ampélio, Eusébio e Rita, for being the comfort, the warm and the sweetness in this crazy world, thank you for allowing me to be little, no matter how old I get. To my brothers, Rodrigo, Pedro e Henrique, for making me realize what unconditional love is since the moment they were born, for being my eternal mates. And finally, to my parents. To my father, Marcelo, for being my role model of intelligence, achievement and strength, for always challenging me to be the best version of myself, and to my mother, Alexandra, for being my rock, my foundation and the most beautiful human being I ever met, for always allowing me to feel at home. Whatever I grow up to be, I owe to you.

To Vinicius, for being my missing piece. Thank you for the companionship, for always making me laugh, for making me feel safe, for knowing me and loving me, for making me want to grow (when I thought I was all grown up). I love you more than I have the ability to say.

Abstract

Work-related emotional exhaustion (EE) has a negative impact in family functioning, both for the married couple as in the context of parent-child relationships. Until now, few studies have focused on the association between parental work-related emotion exhaustion and children's emotion regulation (ER) and lability (La). This study proposes this link to be moderated by parental emotion suppression (ES). We use Structure Equation Modeling (SEM), on a sample of 146 dual-earner couples with pre-school children. Our results showed that mother's and father's EE related negatively with ER and positively with La; mother's ES related positively with La. Moderation effects were found for mother's (but not father's) EE, through both parents' ES. These findings revealed a dyadic pattern among couples' work-related EE, ES and children's emotion regulation.

Keywords: work-related emotional exhaustion, children's emotion regulation, children's lability, emotion suppression

Resumo

A exaustão emocional ligada ao trabalho (EE) tem um impacto negativo no funcionamento familiar, nomeadamente para o casal, assim como no contexto das interações pais-filhos. Até agora, alguns estudos focaram-se na associação entre a EE dos pais e a regulação emocional (ER) e a labilidade (La), das crianças. O presente estudo propõe que esta relação é moderada pela supressão emocional dos pais (ES). Utilizamos Análise de Equações Estruturais (SEM), numa amostra de 146 casais de duplo-emprego, com filhos em idade pré-escolar. Os resultados demonstraram que a EE dos pais e das mães se relaciona negativamente com a ER e positivamente com a La, da criança. Os efeitos de moderação foram encontrados para a EE da mãe (mas não do pai), através da ES de ambos os pais. Estas evidências revelam a existência de um padrão diádico entre a EE ligada ao trabalho dos casais, a ES e as competências de regulação emocional das crianças.

Palavras-chave: exaustão emocional ligada ao trabalho, regulação emocional da criança, labilidade, supressão emocional

Resumé

L'épuisement émotionnel au travail (EE) a un impact négatif sur le fonctionnement de la famille, pour les couples mariés et dans le cadre des interactions parent-enfant. Jusqu'à présent, peu d'études se sont concentrées sur l'association entre l'épuisement émotionnel au travail des parents et la maîtrise des émotions (ER) et labilité (La) des enfants. Cette étude propose que ce lien soit modéré par la suppression émotionnelle des parents (ES). Nous utilisons la modélisation par équations structurelles (SEM), sur un échantillon de 146 couples à double revenu avec enfants préscolaires. Nos résultats ont montré que l'EE de la mère et du père associait négativement avec ER et positivement avec La; L'ES de la mère a été liée positivement à La. Des effets de modération ont été constatés pour l'EE de la mère (mais pas du père), par l'intermédiaire de l'ES des deux parents. Ces résultats ont révélé un schéma dyadique entre le l'EE des couples, l'ES et la maîtrise des émotions des enfants.

Mots-clés : épuisement émotionnel au travail, maîtrise des émotions des enfants, labilité, suppression émotionnelle

In today's post-industrialized society, men and women face the difficult task of trying to conciliate the increasingly demanding and stressful professional roles with parenting and child rearing. Conflict resulting from the overload in one or both roles, constitutes one of the five main psychosocial risk factors in modern European societies (European Agency of Safety and Health at Work, 2010), particularly for Portuguese people, who hold the highest level of family stress and work-family stress (Guerreiro & Carvalho, 2007)

Considering the emotional component of burnout from work overload, authors found evidence for the association between emotional exhaustion and difficulties in family functioning (e.g., lower levels of marital satisfaction and positive affect, decreased family cohesion, higher levels of work-to-family conflict and a "disconnected" pattern of affect reciprocity of both positive and negative affect) (Liang, 2015; Roberts & Levenson, 2001; Thompson, Kirk, & Brown, 2005).

As the family context, and especially parent-child interactions, is one of the most important settings in which children learn to socialize and regulate their emotional experiences (Cole, Martin, & Dennis, 2004; Fosco & Grych, 2012; Thompson, 2014), it becomes clear that the quality and consistency of parental responses to children's emotional needs are a factor of undeniable influence for the acquisition of self-regulation (Cassidy, 1994; Cole et al., 2004; Kopp, 1982). Hence, one can hypothesize that perceptions of work-related emotional exhaustion by either men or women may lead to a more negative and disconnected emotional environment in the family setting, which will not only impact the married couples' emotional exchange, but also the development of children's emotion regulation competences via the decreased emotional availability of parental figures. Several authors stressed the importance of emotion regulation skills on children's development of secure social relationships (Cassidy, 1994), children's social efficacy (Eisenberg, Cumberland, & Spinrad, 1998; Thompson, 1990, 1994), performance in specific cognitive task with long-term objectives (Mischel & Mischel, 1983) and management of stressful experiences in the family setting (Cummings, Pellegrini, Notarius, & Cummings, 1989)

The present study proposes to examine relationship between parental work-related emotional exhaustion and emotional regulation in pre-school aged children, and test whether parent's emotion suppression moderates this association, in the context of Portuguese families, which currently have one of the highest percentages of dual-earner couples (with both parents working full-time jobs), in the European Union (European Commission, 2014).

Children's Emotional Regulation

Emotion can be defined as a pattern of perception, experience, physiological activation, action and communication, biologically based and short-termed, which occurs in response to stimuli from a given physical and social context (Keltner & Gross, 1999). Although there has been some discussion over the role of emotions in the adjustment and functional development of individuals, most authors agree that an optimal, organized functioning is, in part, dependent on the flexibility of emotional responses. In other words, in order for the individual to respond rapidly and efficiently to his ever-changing surroundings, emotional reactions should not be rigid or stereotypical, they should be contextually specific (Aldao, 2013; Cicchetti, Ganiban, & Barnett, 1991; Thompson, 1994).

Young children depend on the efforts of parents and caregivers in order to monitor, interpret and regulate emotional activation (Cole, Martin, & Dennis, 2004; Morris, Silk, Steinberg, Myers, & Robison, 2007). Later on, the development of emotion management and regulation skills is linked to the gradual acquirement of regulatory strategies, at a proximal level (i.e., through the contact with parents, peers and other contexts with which the child interacts directly), as well as by the dominant norms and cultural values (Tamir, 2016).

In the context of a stable, responsive and opened family environment, in which there is a consistent and sensitive response to positive and negative emotion expression of both parents and children, it is possible for the child to learn adequate regulatory strategies, resulting in higher levels of emotion regulation (Bowlby, 1979; Morris et al., 2007). Contrarily, when the parental figures are emotionally overburdened, they may be less sensitive and responsive, and the opposite is likely to be truth, that is, children will present more difficulties in emotion regulation and social adjustment (Bowlby, 1979; Cole et al., 2004; Morris et al., 2007).

Various authors have underlined the socialization behaviors that occur within parent-child interaction and that indirectly influence the child's self-regulatory processes, including: parent's reaction to the child's emotions, the discussion with the child about those emotions and parental emotional expressiveness (e.g., Eisenberg et al., 1998; Morris et al., 2007). Non-supportive parent reactions to the expression of the child's negative emotions are linked to a more negative emotional experience, for the child; on the contrary, parent's sensitivity, provision of comfort and utilization of contingencies, contributes to the development of adaptive management skills, in face of stress (Eisenberg et al., 1998).

The family discussion of emotions, particularly when this occurs as part of daily conversations and not just as a disciplinary measure or a mean to regulate social or emotional deficits, can be linked to an increased comprehension by the child of the emotional world (Denham, Mitchell-Copeland, Strandberg, Auerbach & Blair, 1997; Denham et al., 2003; Dunn & Brown, 1994). Lastly, parent's emotional expressiveness, can affect child's interpretation and understanding of emotions (Eisenberg et al., 2001; Morris et al., 2007), either directly (e.g., through modeling) (e.g., Emde, Biringen, Clyman, & Oppenheim, 1991; Denham et al., 1997) or as a mediator or correlate to other aspects of parenthood and child-rearing that have an effect on children's emotion and social competence (Eisenberg et al., 1998). In that order, Emde and collaborators (1991) proposed that, when put into a stressful situation, the child accesses his or her internal depictions of parental emotion (referencing parental emotion-related messages), thus determining the affective meaning of the situation, and beginning to regulate emotions and behaviors accordingly. In another interesting study, Garner and Power (1996) found that negative maternal expressiveness was related to lower levels of children's expressed negative emotions during a task in which children were set to deal with disappointing circumstances.

According to Shields and Cicchetti (1997), children's emotion regulation may be organized according to two dimensions: lability (i.e., unpredictable mood changes and dysregulated negative affect), and emotion regulation (i.e., appropriate affective expression, empathy and self-awareness). Several authors stand by the distinction as a way to better understand the interaction between emotion regulation, its predictors and moderators (Cole, 2014; Dunsmore, Booker, & Ollendick, 2013; Matias et al., 2017a; Rogers, Halberstadt, Castro, MacCormack, & Garrett-Peters, 2016).

Parental Emotional Exhaustion

The often-conflicting demands from work and family life (Demerouti, Bakker, & Schaufeli, 2005; Geurts & Demerouti, 2003; Greenhaus & Beutell, 1985; Grzywacz & Marks, 2000) may have a negative impact not only on a variety of domains in the individual's life (Bolger, DeLongis, Kessler, & Wethington, 1989; Westman, 2001; Staines, 1980) as well as between social partners (Bolger et al., 1989; Demerouti et al., 2005; Liang, 2015; Westman, 2001). These findings are congruent with Bronfenbrenner's (1979, 1994) ecological theory, according to which the interactions amongst members of a same social group (e.g., family) shouldn't be considered separately from the extrafamilial environments in which that group members are inserted.

In situations where there is a perception of professional overload, that is, when the worker is overwhelmed with what he/she believes are unreasonable professional demands, there is a cumulative process of personal burnout that, ultimately, leads to a state of exhaustion (Sluiter, 1999). Emotional exhaustion, the emotional component of this phenomenon, can be defined as a state of fatigue or frustration (Freudenberger, 1974), that emerges as a consequence of physical, affective and cognitive strain, which result from a prolonged exposition to overwhelming professional demands (Demerouti, Bakker, Vardakou, & Kantas, 2002). Several authors have found evidence of a negative association between emotional exhaustion and other variables, such as: work and life satisfaction (Demerouti et al., 2005) and family functioning (i.e., marital satisfaction, family cohesion, affect, work-to-family conflict) (Liang, 2015; Lizano & Barak, 2012; Thompson et al., 2005).

Based on the conservation of resources model proposed by Hobföll (1989, 2002), it is reasonable to think that human experience is based on willingness to fight, protect and create personal resources which maintain a satisfying quality of life; given the potential or effective loss of those resources, the individual suffers. According to this perspective, the experience of professional overload and, more specifically, work-related emotional exhaustion, entails a sense of insufficiency of personal resources, which could signify that the individual is less available to match the demands of other roles, namely in the family setting (Edwards & Rothbard, 2000). However, there's scarce empirical evidence about the relation between this parental unavailability and children's development, specifically, children's emotion regulation.

Parental Emotion Suppression

Emotion suppression may be achieved either through the amplification or the avoidance of emotional experience (Gross, 2014; Gross & Thompson, 2007; Martini & Busseri, 2012; Thompson, 1990, 1994). Within the scope of emotion avoidance strategies, emotion suppression, can be considered as a process through which the externalization of emotional signals is continuously inhibited (Gross & John, 2003). Emotion suppression focuses on the behavioral component of the emotional response (Catterson, Eldesouky, & John, 2016), without there being any modification of the events and dispositions that led to the internal experience of emotion (Gross & John, 2003).

In the context of interpersonal relationships, in which the strategies and goals of emotional regulation are given a considerable emphasis (Campos, Walle, Dahl, & Main,

2011; Martini & Busseri, 2010, 2012; Nezlek & Kuppens, 2008), the suppression of emotion acts upon the component of emotion which informs the social partner of the individual's internal state. This strategy is particularly employed in the mitigation of negative emotional expression, especially of anger (Butler & Gross, 2004).

Although, the strategies for emotion regulation aren't universally effective or adaptive (i.e., depending on individual characteristics and situational components), several studies have proposed that suppression may lead to a variety of negative outcomes, such as a decreased positive emotion experience and less liking from social interaction partners (see Gross, 2014, for a revision). Gross & John (2003) have remarked that higher levels of emotion suppression are often associated with an avoidant attachment pattern, in which the individuals are involved in relationships portrayed by emotional distance and relatively low expectations of their social partner's availability and supportiveness; this conclusion is congruent with empirical findings (e.g., Ávila, Cabral, & Matos, 2011, Brenning & Braet, 2013).

However, the association between higher levels of emotion suppression and negative social outcomes is not linear, and some authors have found contradictory evidence to this prediction (e.g., Catterson et al., 2016; van't Wout, Chang, & Sanfey, 2010). Catterson and collaborators (2016) proposed that the strategic use of emotion suppression in specific situations, may serve important functions, which are compatible with one's goals, only becoming a problem in cases of chronic utilization. In this interesting study, participants were sent text messages six times a day, for six days, directing them to an online survey about their appraisal of personality and emotion regulatory behavior, in the previous thirty minutes. The authors were able to conclude that people use suppression variably in everyday life situations, and that suppression is not necessarily related to negative social outcomes (Catterson et al., 2016)

To summarize, people are not passive in their emotional experience and thus utilize a broad range of emotion regulation strategies to modulate their experience or expression of emotions (Gross & Thompson, 2007; Tamir, 2016). Given the possibility to strategically regulate emotion (e.g., as a mean to achieve social goals), one wonders about the moderating role of this regulation strategy in the relationship between parent's work-related emotional exhaustion and children's development of emotion regulation. On the one side, we could expect that parental emotion suppression can amplify the impact of parental emotional exhaustion on the child's emotion regulation competence. On the other side, one can also

expect that parental emotion suppression may buffer the negative impact of parental emotional exhaustion on the child's emotion regulation competence.

Moreover, the strategic use of emotion suppression in emotion regulation may also be differentiated by gender. According to Flynn, Hollenstein & Mackey (2010) different patterns of emotion regulation by gender seem to be associated with healthy psychological outcomes (i.e., lower levels of depressive symptoms), especially for women who accepted and strategically suppressed their emotions and for men who accepted and didn't suppress their emotions.

Objectives and Hypotheses

Although some authors have studied the effects of work-family conflict in the couple-dyad (e.g., Cinamon, Weisel, & Tzuk, 2007; Demerouti et al., 2005), as well as in parent-child relationships (e.g., Cho & Allen, 2012; Cinamon et al., 2007; Matias et al., 2017a, 2017b; Milkie, Kendig, Nomaguchi, & Denny, 2010; Vieira et al., 2016a, 2016b; Vieira et al., 2016), there is still a lack of investigation about the specific association between work-related parental emotional exhaustion and children's development of emotion regulation competence.

In the present study, we examined the relation between parental work-related emotional exhaustion and emotional regulation in pre-school aged children, and test whether parent's emotion suppression moderates this association. For this, we used a sample of dual-worker couples with at least one child of pre-school age, in an attempt to address both working mothers' and fathers' roles in the developmental outcomes of their children.

Given that work-related emotional exhaustion (EE) has been associated with less positive emotional environments in the family context as well as less family cohesion and affect reciprocity, we expect that this variable will be associated with decreased child emotion regulation skills (ER) and higher levels of children's lability (La) (*hypothesis 1*). Furthermore, considering that children are dependent on their primary caregivers, in this case the parents, to monitor, regulate and later on communicate about emotions, we propose that higher levels of parental emotion suppression (ES), will too be associated with lower ER skills and higher La, in children (*hypothesis 2*). Additionally, we are interested in the moderating effect of parental emotion suppression (ES), in the association between parental emotional exhaustion and child emotion regulation, either through the actor (same parent; *hypothesis 3*) or the partner (other parent; *hypothesis 4*). The direction of the last two hypotheses remains exploratory, due to the lack of studies conducted in the field. Also, we

do not set an hypothesis regarding a differential pattern of crossover effects, as a function of parental gender (see figure 1).

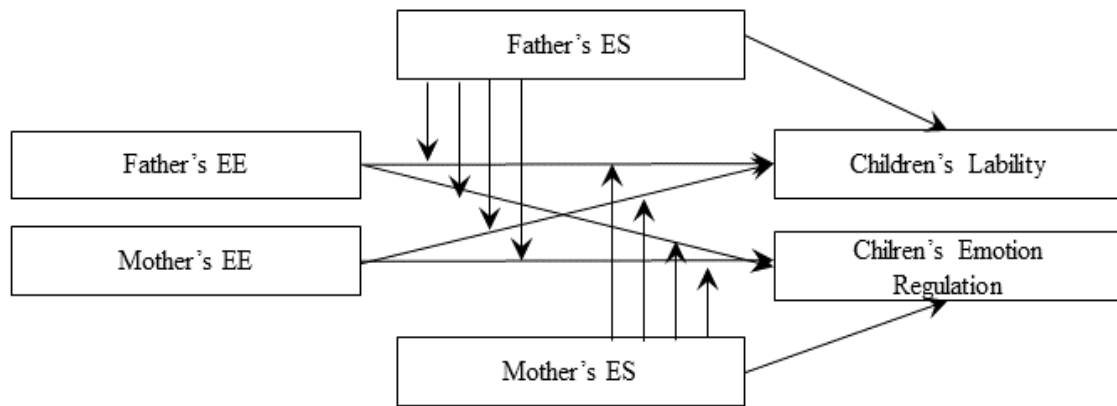


Figure 1. Conceptual model of the proposed direct and indirect relations between parental EE, parental ES, children's liability and children's emotion regulation.

1. Method

1.1. Participants and procedure

A total of 146 heterosexual dual-earner couples with pre-school children participated in the present study. These couples were recruited from both public and private preschools in the metropolitan area of Porto, the most populated district of Portugal. The objectives of this study were explained to both school coordinators and preschool teachers, who then recruited parents who were interested in participating. It was explained to parents that their participation was completely voluntary and that their responses would remain confidential. A written consent form and two envelopes containing the questionnaire (one for each parent) were later provided. The questionnaire was a paper-to-pencil based survey, which both parents should complete individually and then seal in the given envelop and return to their child's teacher. Soon after, all collected questionnaires were returned to the researcher. Data from families in which only one parent completed the questionnaire, was not considered in this study due to our dyadic analysis approach. Participants' age varied between 25 to 51 years old for fathers ($M = 36.95$, $SD = 4.74$) and between 23 to 44 years old for mothers ($M = 35.39$, $SD = 3.79$). In terms of educational level, 69.9% of fathers and 80.8% of mothers had 12 years of education or more (bachelor's, master's or doctorates degrees), and 28.8% of fathers and 16.4% of mothers had less than 12 years of education. The majority of fathers

(96.9%) and mothers (86.6%) worked full-time jobs (≥ 36 hours). Couples had been together for 6 to 283 months ($M = 113.78$, $SD = 46.414$), and the number of children varied between one child (52.1%), two children (42.5%) and three children (3.4%). The children's age varied between 2 and 6 years old ($M = 4.37$, $SD = .90$). In our sample, 54.8% of children were boys, and 45.2% were girls.

This sample is equivalent to the last national census (Instituto Nacional de Estatística, 2011), according to which 55% of the population aged from 25 to 64 years and 88% of the population worked more than 35 hours per week. Furthermore, among Portuguese couples with children, 55% were employed and 50% dual-earner couples have at least one child under 6 years of age. Additionally, the vast majority of children (about 91%) are enrolled in formal preschool facilities. However, in our sample, a substantially higher percentage of couples had a higher education degree, as compared to the national census (27%).

1.2. Measures

Emotional exhaustion was measured using the emotional exhaustion subscale of Oldenburg's Inventory (OLBI) (Demerouti, Bakker, Vardakou, & Kantas, 2003; portuguese version, Campos, Zucoloto, Bonafé, Jordani, & Maroco, 2011). This subscale has eight items (e.g., "There are days when I feel tired before work"), which are rated on a 7-point Likert scale (0 = *never*, 1 = *sometimes per year*, 2 = *once a month*, 3 = *sometimes per month*, 4 = *once a week*, 5 = *sometimes per week*, 6 = *always*). A confirmatory factor analysis (CFA) of the scale showed good model fit, $\chi^2/df = 1.759$, comparative fit index (CFI) = .904, root mean square approximation (RMSEA) = .072. Metric invariance was achieved for factor loadings across the two dyad members, allowing to ascertain that the items represent the same for both mothers and fathers ($\Delta\chi^2(8) = 12.691$, $p = .123$). In our sample, Cronbach's α s for Emotional Exhaustion were .79 for fathers and .85 for mothers.

Emotion suppression was measured using the expressive suppression subscale of the Emotion Regulation Questionnaire (Gross & John, 2003), Portuguese version (Vaz, Martins, & Martins, 2008). This subscale is composed of 4 items (e.g., "I keep my emotions to myself"), which are rated on a 7-point Likert scale (1 = *completely disagree*, 2 = *moderately disagree*, 3 = *disagree a little*, 4 = *don't disagree nor agree*, 5 = *agree a little*, 6 = *moderately agree*, 7 = *completely agree*). A CFA showed good model fit, $\chi^2/df = 1.253$, CFI = .987, RMSEA = .042. Full metric invariance for factor loadings across the two dyads was not achieved, due to significant differences between mothers' and fathers' score in one of the items ("When I'm feeling negative emotions, I make sure not to express them"). Once the

constraint for this item was released, the fit of the partially constrained model was not significantly different from the unconstrained model ($\Delta x^2(3) = 5.025$, $p = .170$), indicating the existence of partial metric invariance. In this sample, Cronbach's α s for the four items of Emotion Suppression were .76 for fathers and .83 for mothers.

Child Emotion Regulation was measured using the Emotion Regulation Checklist (ERC) (Shields & Cicchetti, 1997), Portuguese version (Alves & Cruz, 2013). Seven items from the Emotion Regulation (ER) subscale were used to measure parental perceptions of children's emotional expression skills in a socially adaptive way, to be emphatic and to control emotions in social interactions (e.g., "Displays negative emotions (anger, fear, frustration, distress) in an appropriate manner"). Nine items from the Lability (La) subscale were used to measure parental perception of children's mood swings, angry reactivity, and intensity of positive and negative emotions (e.g., "Exhibits wide mood swings (child's emotional state is difficult to anticipate because s/he moves quickly from positive to negative moods)"). Parents were asked to report on a 4-point scale (1 = *never*, 2 = *sometimes*, 3 = *frequently*, 4 = *almost always*). In both subscales, items with low factor loadings were eliminated, in order to obtain a better model fit. A CFA showed a good model fit of emotion regulation, $\chi^2/df = 1.419$, CFI = .899, RMSEA = .054 and lability, $\chi^2/df = 1.433$, CFI = .924 RMSEA = .055. Metric invariance for factor loadings across the dyad members was once achieved for lability ($\Delta x^2(9) = 15.521$, $p = .078$), but not for Emotion Regulation. Regarding the latter, following analysis showed that mothers and fathers scored differently in one of the items ("*Is a cheerful child*"); when the constraint was relaxed for this item, the analysis revealed no significant difference between the unconstrained and constrained models, $\Delta x^2(6) = 6.458$, $p = .374$. In this sample, Cronbach's α s for the seven items of Emotion Regulation were .62 for fathers and .63 for mothers and for the nine items of Lability were .81 for fathers and .81 for mothers. Lability and ER scores were computed using the factorial weight of each parent report.

2. Data analysis

We conducted a curve estimation for every relationship in our model to determine whether they were sufficiently linear to proceed with Structural Equation Model. The absence of multicollinearity was also assured for all factors.

The proposed models were tested with Structure Equation Modeling (SEM), with Maximum-Likelihood Estimation method (AMOS 24 software IBM SPSS). SEM allows to

simultaneously test relationships between sets of variables from both members of the dyad, as well as comparison of the magnitudes of competing regression paths; also, SEM is particularly suitable for testing moderated models. Because none of the items had more than 5% missing values, and these were missing at random, we chose to estimate them using expectation maximization (Tabachnick & Fidell, 2007). Both intraindividual and interindividual effects were analyzed within our model. Specifically, we estimated the direct effects of each parent's EE on child's ER and La as well as the indirect relationship between each parent's EE and child's ER, as moderated by the same parent's ES (actor effects) and the other parent's ES (partner effects). As a mean to minimize biases in the estimation effects, error of measurement in observed variables were allowed to covary across dyads members, accounting for dyadic nonindependence (Kenny, Kashy, & Cook, 2006). Due to sample size and the number of parameters in the model, all variables were modelled as observed variables.

The manifest variables used in the path models were estimated through the factorial weights and measurement error obtained during the initial CFA procedure (full or partial measurement invariance across gender was guaranteed before conduction of this procedure). For the ER and Lability subscales, fathers' and mothers' reports were strongly and significantly correlated (ER, $r = .77, p < .001$ and Lability, $r = .76, p < .001$); therefore, total scores were obtained through the mean of each parents reports.

Initially, an evaluation of the model's fit was conducted through the analysis of the χ^2/df , CFI and RMSEA. According to Schweizer (2010), we consider the model to be acceptably fitted if χ^2/df is less than 3; CFI values are between .90 and 1.00 and RMSEA values are less than .08.

All non-significant paths were trimmed and a final model fit was estimated. We tested gender invariance between mothers and fathers; initially, we used a less constrained model in which relations between parent's variables and children's ER and La were allowed to vary freely for both mothers and fathers; then, equality constraints were imposed on these relations, one pair at a time. The paths found to be equal across genders (mother's and father's EE to child's ER and to child's Lability), were therefore constrained to equality.

Lastly, moderation effects were tested at the individual level, through the inclusion of the interaction terms: father's EE x father's ES, father's EE x mother's ES, mother's EE x mother's ES, mother's EE x father's ES.

3. Results

3.1. Preliminary analysis

Table 1 presents the means, standard deviations and Pearson bivariate correlations of all variables for both mothers and fathers. Both fathers' and mothers' EE were correlated with their own and their partner's ES. The correlations between both parents (within-dyad correlations) confirmed the interdependence of the partner's data, validating the need to account for non-independence in the analytical strategy. Additionally, children's lability was associated with both fathers' and mothers' EE, as well as mothers' ES. As for children's ER, correlations were found for both parents' EE, but not ES variables.

Table 1

Zero-order Pearson bivariate intercorrelations between father's emotional exhaustion, mother's emotional, father's emotion suppression, mother's emotion suppression, children's emotion regulation and children's lability, and paired-sample t test between parent's variables

	1	2	3	4	5	6
1. Children's lability	1					
2. Children's emotion regulation	-.296**	1				
3. Father's emotional exhaustion	.288**	-.168*	1			
4. Mother's emotional exhaustion	.226**	-.221**	.187*	1		
5. Father's emotion suppression	.132	-.115	.270**	.171*	1	
6. Mother's emotion suppression	.290**	-.050	.284**	.177*	.553**	1
<i>M</i>	4.4530	1.9089	2.3412	2.7936	1.2771	2.0049
<i>SD</i>	0.8269	0.1690	0.4323	0.5008	0.5630	1.0357
<i>T</i>	-.889	-105.434***		-.002		-10.190***
<i>D</i>	0.064	10.211		0.970		0.910

Note. *T* stands for the test statistic (T student) and *d* stands for Cohen's effect size.

^aThe paired-sample *t* test was calculated between mothers' and father's scores of lability.

^bThe paired-sample *t* test was calculated between mothers' and father's scores of emotion regulation.

p* < .05 *p* < .01 ****p* < .001

The results of the paired-samples *t*-test showed that there is a difference between mother's and father's perception of children's ER (mothers tend to rate higher in this

measure) but not regarding children's La. This might be due to the fact that lability entails a negative affective state, characterized, for instance, by emotional bursts and intensive affective states, which are more easily identified by both parents than ER skills, which entail, among other things, the ability of being positive within social interactions or being able to communicate about one's emotional state. Moreover, mothers expressed higher ES, than fathers.

3.2. Direct and moderating effects of parental EE and ES on children's lability and ER

The proposed model included all links from parent's perceptions of EE and ES to children's ER and Lability, as well as the moderator variables, which tested for the moderating role of ES in the relationship between mothers' and fathers' EE and children's ER and Lability.

We tested and included two equality constraints to the final model, specifically, the path from both mothers' and fathers' EE to children's ER. The final model with the similar paths between fathers and mothers constrained to be equal provided good fit to the data ($X^2/df = .421$ CFI = 1.000; RMSEA < .001) (see Table 2).

A series of models were fit to determine main and moderating effects of parental EE and parental ES on children's ER and Lability. Both mothers' and fathers' EE were negatively associated with children's ER and positively associated with children's lability. Mother's ES was positively associated with children's Lability, but not with children's ER. As for the moderating effects of parental ES, both mothers' and fathers' ES moderate the relationship between mothers' EE (but not fathers') and children's Lability (see figures 2 and 3). These results reveal that, when mothers' ES is high, EE has no effect in children's lability; contrarily, when mothers' ES levels are low, mothers' EE is associated with significantly higher levels of children's lability. As for the father, our study shows that, higher levels of fathers' ES result in higher levels of lability, in the presence of mothers' EE. In the present study, no moderating effects were found in association with children's ER.

The model explained approximately 6% of children's ER and 21% of children's lability.

Table 2

Unstandardized effect estimates for the final partially constrained model

Effect	Estimate	SE	P
Father's EE → Children's ER	-.060	.019	.002
Mother's EE → Children's ER	-.060	.019	.002
Father's EE → Children's Lability	.312	.089	<.001
Mother's EE → Children's Lability	.312	.089	<.001
Mother's ES → Children's Lability	.252	.071	<.001
Mother's EE X Mother's ES → Children's Lability	-.390	.130	.003
Mother's EE X Father's ES → Children's Lability	-.208	.253	.029

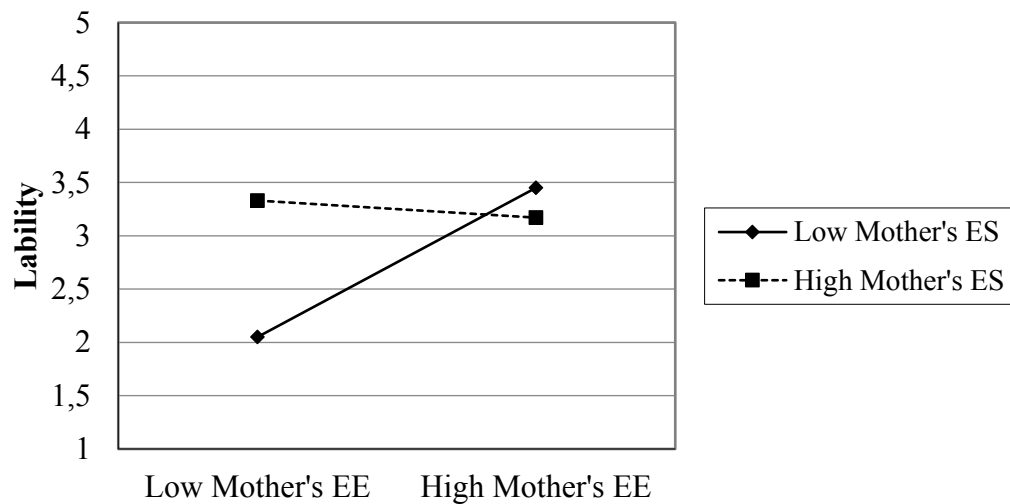


Figure 2. Moderating effects between mothers' Emotion Suppression and mothers' Emotional Exhaustion (Burnout) on children's Lability (partially constrained model).

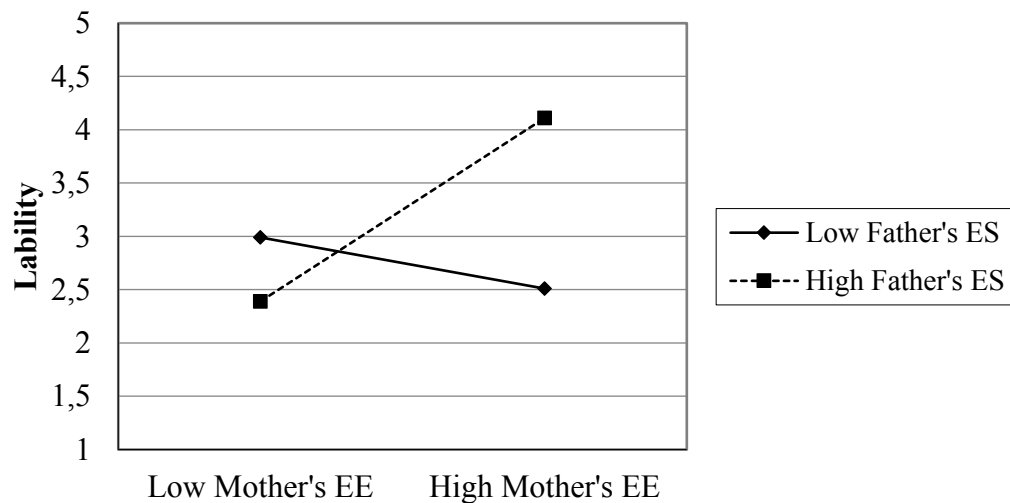


Figure 3. Moderating effects between fathers' Emotion Suppression and mothers' Emotional Exhaustion (Burnout) on children's Lability (partially constrained model).

4. Discussion

This study examined the extent to which mothers' and fathers' ES moderated the relationship between their perception of work related EE and the development of ER skills by their children. We chose to conduct dyadic analysis which allows the simultaneous analysis of both crossover effects, between parental emotional experience and children's emotional development, and between mothers' and fathers' experiences. Our findings support an ecological systems framework, according to which parental variables, such as parental EE, even when associated with parents' work settings (extrafamilial dimension), can affect children's characteristics and development, directly and through parent's ES.

We found negative effects of parental work related emotional exhaustion on children's development of emotion regulation skills, within both mother-child and father-child relationships. We believe these findings extend the relevant literature in that most of the existing research has analyzed work-family conflict in terms of individual resources, like time, attention and energy, thus neglecting the role of the emotional dimension of professional strain, especially in what concerns its association with family and parenting dimensions. Specifically, we observed that, for both fathers and mothers, the experience of work-related EE was associated with lower levels of child's ER and higher levels of lability (*hypothesis 1*).

It is also relevant that, for mothers but not fathers, higher levels of ES were associated with increased lability in children (*hypothesis 2*). Although in this study, we did not have a measure for parent-child interaction, we believe that parents' work-related EE will affect lability through these interactions. This finding is consistent with the observations of Eisenberg, Cubberland and Spinrad (1998), which noted the importance of parent-child interactions for the development of children's self-regulatory processes. Thus, in spite of the lack of research about the specific relationship between parental ES and children's ER, it seems reasonable to assume that parental ES influences parent's reaction to children's emotions and the discussion of such emotional experience, both of which are key socialization behaviours with an indirect influence on the child's self-regulatory processes (Eisenberg et al., 1998). As for the gender difference observed, we propose the existence of a disparity in cultural expectations concerning men's and women's expression of emotions; as such, women, and consequently mothers are expected to be more expressive, whereas fathers are expected to be more contained, which may explain why father's emotion suppression didn't seem to have an impact on children's lability. On the other hand, it is

possible that mothers spend more times with children than do fathers, thus exercising a stronger influence on them.

However, when we consider the moderating effect of ES in such cases where the parents are emotionally exhausted, due to work, an interesting pattern arises. It seems that when mothers are experiencing work-related EE, their lower levels of ES are associated with increased children's lability (*hypothesis 3*). On the contrary, in face of mothers' work-related EE, fathers' ES results in increased levels of children's lability, for the child (*hypothesis 4*). We find this to be consistent with the proposal of Catterson and collaborators (2016) that the strategic use of ES in specific situations may be beneficial for the individual and, by extend, for its social partners. In the context of parent-child relationship, ES may serve as a mechanism to shield the child from negative affect, resulting from work-related EE; this is not necessarily negative, for the child, as long as there is one other parent who is emotional available, expressive and communicative.

The fact that parental suppression only seemed to moderate the effects of mother's EE may suggest that there is a gender difference in the use of ES as a strategy for emotion regulation. This finding is consistent with the idea that different patterns of emotion regulation by gender seem to be associated with healthy psychological outcomes (Flynn et al., 2010). Interestingly, moderating effects in our study were only significant in relation with children's lability (and not ER); this may be due to the fact that a more powerful link is established between two negative affect states (in this case, lability and emotional exhaustion). A similar pattern was found by Matias and colaboradores (2017a), when accounting for the associations between children's lability and ER and parents' work-family conflict. In one hand, the intensive negative affective states, associated with child's lability, may be more prominent when parents' are already emotionally drained from work, in comparison to ER skills, which are comprised of children's appropriate affect expression, self-awareness, positivity, etc. On the other hand, according to Rogers (2016), lability is more affected by parental socialization than ER, which is characterized by behaviors that are more neutral in affect. Lability and ER also correlate differently with specific child outcomes; for instance lability (and not ER) has been pointed as a predictor of children's internalizing problems (Eisenberg et al., 2005), although ER may mediate this association (Kim-Spoon et al., 2013). Additionally, it is important to note that, comparing to lability, our measure of ER had low internal consistency, which also may account for this lack of results.

5. Limitations and future directions

The results presented in this paper should be interpreted in light of its limitations. First, the data in this study is cross-sectional, thus casual inferences cannot be drawn. Although parents were asked to report on their work-related EE, it is possible that children's ER has some indirect influence in parental perception of emotional exhaustion. In spite of this, both our analysis model and resulting inferences were theoretically driven. Second, all the measurements in the present study were self-reported, which means scores may be subjected to social desirability. Future research should try to replicate these findings using longitudinal methods, allowing to analyze the changes in ER development, as the child ages, as well as the utilization of emotion suppression, either as a emotion regulation strategy or a chronic dispositional trait. Future studies would also benefit from the utilization of observation methods to further evaluate ER competences and child lability, especially when complemented by multi-informant reports. Third, ES is a broad concept, and one that involves activity in different domains: facial expression, internal experiences or thoughts (Aldao, 2013); in the present study, ES was measured by a self-report questionnaire focused on the behavioral expression of emotions alone, thus interfering with the ability to make cross-study comparisons. It would be interesting to expand on this findings through a more complex evaluation of ES in relation to other ER strategies. Even so, our findings extend on the previous ER literature, by associating children's ER competences with parents work-related EE and ES, and by revealing a dyadic pattern of such variables within the married couple. In the future, it would be interesting to analyse the effects of this associations, as a function of children's gender.

6. Implications

Learning to regulate one's emotional states is often referred to as one of the most important tasks of child's development, predicting not only school adjustment and social competence (Blair et al., 2014; Denham et al., 2003; Herndon, Bailey, Shewark, Denham, & Bassett, 2013; Spinrad et al., 2006), as well as later well-being and adjustment (Hourigan, Goodman, & Southam-Gerow, 2011; Rogers et al., 2016). Understanding the way children learn and develop ER skills is the first step to an informed and evidence-based practice, whether in the clinical context as in the creation of adequate parent education programs. Specifically in what concerns the relation between parental work-related EE and children

outcomes, we believe the findings in this study further underline the need for initiatives in the parent's work place, that support their need of conciliation between work and family demands and thus attenuate the impact of work-related EE. As for the association between parental ES and children's ER /Lability, the conclusions in this study follow a line of thought initiated by other authors, pertaining the use of ES as an adequate strategy of emotion regulation in some settings (Aldao, 2013; Catterson et al., 2016). Accordingly, this study emphasizes the role of instrumental and social motives in emotion regulation (in this case the use of ES to protect the child of the negative outcomes resulting from work-related EE), in the context of the couple dyad, in which the partner steps up and uses an alternate strategy to regulate his emotion and make himself available for the child's emotional needs. This is an exciting finding and one that hopefully will lead to more dyadic partner analysis of familiar relationships.

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